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compositions be taken, partly from the prescribed books, and partly from the student's own thought and experience.

- 7. That each of the books prescribed for study be taught with reference to
 - a. The language, including the meaning of the words and sentences the important qualities of style, and the important allusions.
 - b. The plan of the work, i. e., its structure and method.
 - c. The place of the work in literary history, the circumstances of its production, and the life of its author.

That all details be studied, not as ends in themselves, but as means to a comprehension of the whole.

A report having been presented by the committee appointed to prepare a list of books for voluntary reading in the schools, it was accepted as a report of progress, and the committee was continued.

It was voted as the sense of the Conference that, in adjourning, it be to meet again in the spring of 1899, and that if, in the meantime, occasion should arise for a special meeting, the chairman and secretary be authorized to call such meeting.

The secretary was instructed to express the thanks of the Conference to the authorities of the University of Pennsylvania and of Houston Hall for their gracious hospitality.

The Conference thereupon adjourned.

ALBERT S. COOK, Secretary

At the close of the business session a recess of short duration was taken. Whereupon the Chair introduced as the speaker Hon. Frank A. Hill, secretary of the Massachusetts Board of Education, whose subject was

HOW FAR THE PUBLIC HIGH SCHOOL IS A JUST CHARGE UPON THE PUBLIC TREASURY

I have been asked to answer the question, "How far is the public high school a just charge upon the public treasury?" I shall have to limit my answer to Massachusetts, although, in the nature of the case, whatever answer may satisfy Massachusetts is likely to serve, in some measure, other states as well.

Although the towns do not return their high-school expenditures in a separate statement, a fairly trustworthy approximation to the aggregate of such expenditures is attainable in several ways. If we bring together the expenditures for all school purposes, including new buildings and old, as reported in the

latest school returns, then out of an average total tax for the state of \$15.23 on a thousand dollars, we shall find that the amount expended for schools was \$4.72, of which amount 91 cents was for high schools; or, if we exclude expenditures on buildings, which are subject to wide fluctuations in their annual aggregates as well as to great unevenness of division between high school and lower school purposes, and deal only with current expenses, we shall find that the amount expended for schools was \$2.95 on a thousand, of which 58 cents was for high schools. In other words, a little less than one fifth of the money raised for public schools in Massachusetts is expended upon the high schools. If the thirteen grades of pupils in our public schools had the same number of pupils in each, and if the school money were equally divided among all the grades, the four high-school grades would be entitled to four thirteenths of this money, or a little less than one third. As a matter of fact they receive, as has just been said, a little less than one fifth of it. This is because the number of pupils falls off from the lower grades to the higher, so that, notwithstanding the greater cost of education in the high school, the four high-school grades require much less money than any four grades below.

Now how far is this high-school tax a just charge upon the public treasury? The form of the question seems to suggest that it is just for the public to contribute something towards the support of the high school, but that it is an open question precisely how large that contribution shall be. The spirit of the question, however, seems to require a consideration of the reasons why the high school should be treated as an essential part of the public-school system and dealt with accordingly. Though these reasons are old, it is well to review them from time to time see whether they are sound or not.

I will not discuss the justice of making education in general a charge upon the public treasury. For two centuries and a half Massachusetts has clung most tenaciously to two fundamental thoughts about this matter. One is that every child—the humblest as well as the proudest—is entitled to a fair edu-

cation. Nay, he is not simply entitled to it, but the state must see that he has it. And the other is that the cost of this education is a legitimate public charge. Under stress of poverty or war Massachusetts has wavered at times in application of these principles, but never in loyalty to their essence. They are deeply intrenched in the universal conviction; they have found splendid expression in the supreme law; they are woven as unbroken strands into the substance of her history. Indeed, it is idle to make a show of defending a citadel that is a Gibraltar in itself and that no enemy of consequence now attacks.

When we leave education in general and think of secondary education in particular, we shall have to say that, so far as legal or technical justice is concerned, the high-school tax as well as the general school tax is a just charge upon the public treasury. That is to say, there has never been a time since 1647 when the laws of Massachusetts did not require certain towns to maintain at public expense grammar schools, i. ϵ ., college preparatory schools, or their modern equivalents or successors popularly known as high schools. It has not been simply the legal right of these towns to tax themselves for the support of secondary schools, but it has been their legal duty to do so; and towns were not rarely "presented," as the old records run, and fined for failure to discharge this duty.

And when Massachusetts became a state the people took pains to clinch this policy of colonial and provincial times by putting into the Constitution these words: "It shall be the duty of legislatures and magistrates, in all future periods of this commonwealth, to cherish the interests of literature and the sciences, and all seminaries of them; especially the university at Cambridge, public schools and grammar schools in the towns." In other words, the ancient and historic grammar schools that taught Latin, Greek and mathematics, with such minor variations in the curriculum as the people saw fit to make, and that were supported at public expense, were specifically mentioned by the people in that "solemn and mutual agreement" as schools which legislatures are constitutionally bound to cherish. In

response to this duty, imposed upon them by the supreme law, our legislatures have again and again made requirements relating to grammar or high schools, while the towns, within the realm of local control, have, in numerous instances, gone far beyond the letter of such state requirements.

And when now and then conservative, skeptical or intractable persons have questioned the liberal action of the towns toward high schools, and have applied to the courts to restrain them in such action, the highest judical authority has invariably stood for the larger, the more generous interpretation of the high-school policy of the state. So that the justice of the highschool tax, if we consider simply such questions of legality as are settled by the Constitution, the laws and the decisions of the courts, rests on the solidest of rock.

To be sure, we now and then hear it said that the merest elements of an education will do for the toiling millions. should humble John Doe go to the high school? It is enough that he can read and write. What more does he need for plying the hoe or pushing the plane? To fill his horizon with tantalizing mirage effects, to fire his plebeian soul with vain longings, to sow discontent in his simple life, to train him to impatience under his natural leaders - in short, to school him above his station—this is bad both for John and for the community he should serve. Training the masses beyond their station! It is high time that under a popular government like ours the use of this word "masses" in any sense that excludes the user from the masses of which he speaks or that prompts him to say "they" and not "we" should cease. Who are these superior beings that presume to sit thus in judgment upon their fellows, to assign them to classes, according to their high pleasure, to set for them metes and bounds beyond which they shall not go? By what right, under our form of government, does any human being dare to say that I must grovel while you may aspire, that the primary school must suffice for my children while the university is for yours, that I must serve while you must rule? A believer in an aristocracy, a monarchy, the

divine right of kings may, perhaps, consistently venture to dispose of you and me, of yours and mine, in this summary way, but not a believer in a democracy, a republic, the divine right of the people. Indeed, article six in the Massachusetts declaration of rights records the deliberate and carefully expressed conviction of the people that "the idea of a man born a magistrate, lawgiver or judge is absurd and unnatural."

And so freedom of choice, when the question of what one's life work shall be comes up, is a basic thing in government by the people. Upon the wisdom of this choice turns the welfare of each unit in the state and therefore of the state itself. So vital is the connection between the individual's choice and the state's integrity, so essential to wisdom of choice is one's awakening to his own capacity and one's vision of the prizes that are possible to such awakening, that no state can afford to suffer its children or any portion of them to grow up without this revelation of themselves to themselves and without this stimulus from the splendid visions of a larger usefulness and a finer happiness.

It is, indeed, true that in spite of the state's effort through its public schools, to promote freedom and wisdom of choice, some people continue to make egregious blunders in their life plans. John Doe, for instance, aspires to teach when he had better break stones. "All wrong," we say, as we think of John's suffering pupils. But when we take a larger view, we begin to discriminate. If John Doe has blundered, we have sinned. John Doe did the best he could with his freedom in choosing a business. We have not done the best we could with our freedom in choosing a teacher. It is essential that John Doe shall exercise freedom of choice. It is not essential that the public shall endorse that choice. If it is important that John Doe shall modify or change his choice, it is essential that the public shall not be too indulgent or gullible in the presence of his faith in the wisdom of that choice. So let John Doe choose as he pleases; let him choose amiss, if his judgment is at fault and his friends cannot dissuade him, and let his blunders bring him to

grief that he may blunder the less thereafter. All the same, the chance John has is stimulating, developing. He is probably better off for trying to do something with it in spite of his misjudged use of it. I am not sure but that his failure in the larger endeavor leaves him more of a man than success in the smaller endeavor; I limit this hazardous thought, of course, to the realm of honest endeavor. "A sadder and wiser man," we sometimes say of John Doe when his misfit career is suddenly checked. If his wisdom lifts him out of his sadness and sets him in his true orbit, his experience certainly leaves him more of a man than before. At any rate, it leaves him as a lesson, a caution, a monument, for the guidance of other struggling souls—a kind of left-handed service to which the renderer cannot, indeed, point with pride, but by which the struggling souls referred to may fairly profit.

And so the total result of the process when people in general try to make something of the opportunities which are theirs under a wise government of their own is an uplift of the state through the enlargement and stimulus of its members, and an uplift of its members through the enlargement and stimulus of the state. It is the essence of democracy—this freedom of intelligent initiative and push by the individual along the lines of his taste or capacity, a freedom that permits him to rise from the lower plane to the higher, if he can and will. So good a thing is such freedom for the individual and, therefore, for the state, that the public should spare no pains to keep the avenues of ascent open. If free public education of a high order keeps these avenues open—and with all its imperfections it seems the wisest scheme for this purpose that human ingenuity has yet succeeded in devising—that settles the wisdom of having it.

Now it is precisely here, in loyalty to this ideal of free, open, attractive avenues by which the humblest child, if capable, may ascend to better things, that Massachusetts stands today; and I need rather to apologize for taking your time to hint at the reasons why she has taken this stand than to show any solicitude as to the validity of those reasons.

If, however, the justice of the high-school tax in its constitutional, legal and judicial aspects is beyond question, it is still legitimate to inquire whether the public is receiving what it ought from its high-school expenditure, or whether the high school is receiving what it ought from public taxation. if it should appear that high-school results are too meager for the money that is paid for them or that the money paid for them is too meager to make the results reputable, it would simply follow, in the one case, that the money available for the high school ought to be expended to better purpose, and, in the other, that there ought to be more money available for the high school. In neither case would it be proper to call the high-school tax unjust any more than it would be proper to call a highway or any other customary municipal tax unjust because it is too small or too large, or because it is carelessly or corruptly used. We may affirm lack of judgment in such cases, which is an unintended injustice to the taxpayer, or even lack of honesty, which is an intended injustice to him, but such injustice is an avoidable incident in raising or expending the money, not a defect inherent in the nature and purpose of the tax itself.

The relation of any tax to the people's ability to pay it, under our form of government, is dependent on the people's willingness to pay it; and this willingness, in its turn, is dependent on the people's intelligent appreciation of the benefits the tax is supposed to bring. The tax should not be so heavy as to check production, to devour income, to extinguish ambition, in short, to kill the goose that lays the golden egg; but what its basis shall be, just what percentage of this basis shall constitute the tax, how the tax shall be distributed among the various purposes it should serve, how each portion of it shall be expendedthese, with scores of allied matters, are always likely to be open questions. In their nature they do not admit of exact, complete and final answers. It is not what people casually say that must be taken as their true answers to these questions but what they directly or through their representatives actually vote for. When the legislature in 1824 voted to exempt nearly every town in the state from maintaining a high school, this meant that, in the popular judgment of that time, the high school was an institution of so great expense and so limited service that only the largest and wealthiest towns ought to be required to maintain it. When the legislature in 1891 ordered that every town should be required to provide its properly qualified children with free high-school tuition, this meant that, in the popular judgment of that time, high-school education was of so great and general value that, notwithstanding its expense, no child ought to be denied free access to it.

In short, our people are doing far more for education today than in 1824, and yet they are doing it more easily. The voice of the grumbler, I suppose, will never cease, but it is less often heard today than then. Here and there, indeed, we see a town that is pitifully burdened, paying double or quadruple the school tax of its wealthier neighbors and yet powerless to command the schooling it ought to have. Such unevenness, whether of burdens or of results, is regrettable; the state does something to reduce it and should do more. Still the inequalities are not what they once were under the vicious district school system. It may be safely said that, whatever defects of taxation need to be remedied, the people as a whole are not excessively taxed certainly not to the verge of rebellion, as in Cuba or Italy, or of confiscation, as in parts of Turkey; for when the people tax themselves, they are not likely to do it with suicidal intent, even if once in a while they do it with suicidal result. From the European point of view we all live in a kind of taxpayers' paradise, although, from our point of view, we are inclined to restrict his paradise to such towns as Milton, Nahant, and Manchester-by-the-Sea.

Leaving these general thoughts, let me say that we may find ample moral justification of the high-school tax not only in what the high school, at its best, is theoretically fitted to do for the youth of the state, but also in what the high school, with all its faults, is actually doing for them. Possibly, if I limit myself to the blessings the ideal high school is likely to confer upon the public, I shall be open to the charge of trying to justify a public tax by what might be, if things were different, than by what is, things being as they are. It is better, therefore, to take our high-school facts just as they are, the bright, the dark, and the neutral, and to inquire if they justify the present tax. If they do, then they may be worth improving, even if it takes a little more money to do it. What are some of these facts?

One well-recognized and valuable fact is this, that the high school exerts a powerful stimulus for good upon the schools below. It holds up before the young ideals of higher and broader scholarship; it is the gateway to otherwise inaccessible realms beyond; it appeals to the ambition of the young; it appeals to this ambition at a critical time, when it is important that inferior ambitions shall be forestalled; it is a golden strand in that interest which holds the young up to scholarly endeavor. It fits in with the thought that noble inspiration comes from above, not from below, that normal children respond better, not when they are pushed from beneath, but when they are drawn from on high. The longing for higher things thus aroused, children do better work in the lower schools; they are more readily guided; they hold to a definite course more steadily. Indeed, it is as true of the mind as of any ship that sails the seas that it must have momentum to obey its helm. ambition to attend the high school is, in some measure, imitative -a mere spirit to do as others do-it is, in a larger measure, a spirit to study for study's sake or for the rewards that study brings. It is not surprising, therefore, that school committees, with scarcely an exception, should bear witness to the bracing influence of a good high school upon the grades below, experience thus confirming what theory would lead one to expect.

Again, high-school work is becoming more and more a natural and desirable, if not a necessary, continuation of the work below. The exclusion of rich subjects from the lower grades because they are assigned to the high school leads people to think of such themes as belonging to a less useful, a more luxurious education. When they are not tasted below there is little longing for them above. And so there comes to be, at the gateway of the high school, a seductive and plausible halting place in the schooling of many a child. Now such a break is neither a logical nor a desirable one. Even when the attempt is made to promote unity, and so reduce the break in question, by putting nature study into the lower grades to go with the sciences of the upper, some are inclined to restrict the work below to the observation of isolated facts while extending the work above to the classification of such facts; in short, to view the work below as wholly preliminary to scientific study and apart from it, while regarding the work above as being for the first time truly scientific. "Here is the high school," they seem to reason, with its special name, its special home, its special courses of study, its special corps of teachers, and its special scale of expenditure. What justification is there for all this in an educational philosophy?" So, for one answer to the query, science is cut in two, as it were, its unorganized material summarily assigned to the lower grades and its organized to the higher. As if a well-taught normal child could observe detached, unorganized facts in the lower grades without a suspicion of those natural groupings and underlying principles that go to make up the science of such facts; or deal in the high school with the science of such facts without keeping on with observational study of the separate facts themselves. Some acquaintance with single objects must, indeed, precede recognition of what is common to them, but not in a sense to justify putting the processes that are involved years asunder in a scheme of instruction. may answer, in studying the mind, to isolate its modes of working so as to gain a clearer view of each. It does not follow that there should be a corresponding isolation of these modes in our teaching.

The truer conception is that the mind is a unit. Its workings have the humblest and crudest beginnings. Its development is continuous—a development in rank as it were, as well as in file, the mind broadening out as well as forging ahead. And educative processes should have a corresponding unity. They should

reach the mind on all its sides - stirring its soul, quickening its thought, energizing its will. They should do this by getting at the springs of the child's activity. They should do this in the lowest schools as well as in the highest. With this view there is no natural stopping place in a scheme of study. Conditions outside of the scheme may end one's schooling anywhere, but the course itself is logically continuous, progressive, unbroken to the end. The high school is less and less regarded as a separate and optional, if not superfluous, institution. It is fitting with increasing closeness into the general system. The not infrequent transfer of ninth grade pupils to the high-school building and to high-school care improves this articulation. Pupils are assuming more and more that they are to keep on, as a matter of course, when they reach the high school. All this increases the usefulness of the high school and strengthens its hold on the public.

In the third place, our larger high schools are offering a wider range of choice to divergent tastes and capacities. Either there are parallel courses, any one of which the pupils may elect, or there is some carefully determined minimum which every pupil must take, with a variety of supplementary subjects from which he may choose. Such options are perfectly feasible for the large schools though burdensome to the small. They chime in with the more sensible views of education now held. There is the old knowledge theory that holds, by implication, the ideal of a curriculum of study complete and perfect in itself. There it is; each that—the mind will take care of itself if it is kept busy with a well thought out scheme of subjects to be studied. Then there is the old discipline theory that holds, by implication, the ideal of a typical mind, with its so-called faculties in such and such conditions to begin with while such and such conditions are desirable to end with. Work away at these faculties—it makes little difference in the long run what one studies, provided one's faculties are exploited.

Now neither of these ways is fatally defective. The mind will grow if you give it but little direct thought but keep it

intent on some subject to be mastered. It will grow if you give it all thought, regardless of the theme that is studied except so far as the theme engages this or that so-called faculty whose training is sought. The pressing need is that both the knowledge theory and the discipline theory shall be brought into one, so that the knowledge sought shall meet the demands of the mind and the mind to be trained shall be nourished by the knowledge it gains. Now the natural unifying principle is not to be found in some dead body of things to be learned, nor in some aggregate of mental powers to be coldly treated apart from the living being. It is to be found rather in the individual. This brings us to the development or genetic theory, under which the teacher starts with what the pupil actually is, not with what he theoretically ought to be, and then proceeds as the way opens. One should know things, indeed, and be subjected to wholesome discipline, but the knowledge and the discipline should hold some relation to one's fitness to receive them and so must be duly subordinated. In other words, the development idea involves a reaction from the extremes of class treatment; it carries with it increased respect for individual differences. And so the closer the high school gets to individual needs, the stronger the hold it gains upon the public

In no way can the individual be given a freer play, a finer field for self-exploitation, than through his motor activities. His sensations, emotions, ideas are embodiments of force; they have a dynamic character; they tend to discharge themselves in action. The energy thus set free may be broken up into a thousand aimless rills and so be wasted, or it may be gathered up, directed and made to do valuable work. The child's spontaneous activity springs from interest. If skillfully directed and utilized this activity augments the interest from which it springs. Imitative at first, it at length becomes inventive and even, in a sense, creative. It reacts helpfully upon the ideas that inspire it; it gives them definiteness, clearness, abiding character; it promotes executive power. Without it the schooled

esteem.

are bookish and inert; with it the unschooled become the selfmade men of the world. So fruitful a principle as this cannot be ignored if the whole child is to be properly schooled. people are getting hold of it, and so, through their representatives, have ordered that all cities whose population exceeds twenty thousand each shall maintain manual training courses in The majority of these connection with their high schools. cities have conformed to the law - at least, so far as boys are concerned — and the rest are expected to follow. Thus a new and valuable means of training is coming within reach of the boys and, let us hope, of the girls as well, for a million and a half of the people. There can be no doubt that the more fully and judiciously the high school respects those methods and processes that engage the mind through the motor activities, the more closely it works to individual capacities and needs and the more completely it endears itself to those who have to foot the bills.

In the fourth place, the high school today is a much better avenue to things beyond than it has ever been in the past; moreover, this avenue will in time be broad enough to comprehend all the four years' courses of the high school. When this time comes, a very serious handicap of the high school will have been done away with. For 250 years the people have tried to fit youth for college in ways to please the college; it has been only for a generation or two that they have tried with equal seriousness to build up parallel general courses in the high school to please themselves. In the former task they have had the help of the colleges; in the latter, they have generally been denied that help. By a process of natural selection, college aspirants have averaged somewhat higher than their fellows in blood, ambition and scholarship. And so the college preparatory course has enjoyed a prestige which the general course has found it hard to gain. The one has been a royal avenue,narrow, indeed, but leading straight to the college; the other a common road,—broad enough, but leading nowhere. teacher's reputation has been more at stake in the former than

in the latter; in the one case he has worked with a lively sense of a judgment to come; in the other, with the comfortable feeling that there were generous margins as to the quantity and the quality of what he did and no accounting therefor to powers above. And so it is not strange that instruction in college preparatory work has been, on the whole, more sound, more searching, more successful, than that in general work. Nor is it strange, again, that when the teaching corps has not been large enough to do both kinds of work efficiently, the dregs of interest and energy have often fallen to the latter. All this, of course, has been a handicap to the general course, calculated, in itself, to separate it from the college by a formidable break. If now we add the fact that many subjects indispensable to the general course, like the sciences, for example, do not generally appear in the college admission requirements — at least for the degree of A.B.— the break is widened and deepened.

It is a great and needless burden that the small country high school, with but one or two teachers, cannot concentrate its energies upon some single course that shall contain those subjects which the vast majority of children must have and will not do without, - a course that shall answer alike for the college and the non-college pupils. Whatever the large high school may be able to do with parallel courses, the small high school cannot hope to manage them efficiently. It is a singular fact that, the college threshold once passed, the high-school subjects ignored in college admission examinations begin to appear as college requirements or electives,-an exceedingly late day for beginning with their elements. Indeed, the whole modern drift is towards beginning the attack on such elements in grades below the high school.

Now any condition of affairs that interposes a serious barrier between the vast majority of high-school pupils and the colleges, that is to say, between the people and the colleges, is bad both for the people and for the colleges. It is worth much to the people that they can send their children up to the very doors of the college whatever reputable high-school course

they may take and whether they enter college or not; it is also worth much to the colleges to rest squarely, all along the upper high-school line, upon the system of public-school education and, therefore, still more securely upon the respect and affection of the people. It is not simply a question of self-interest with the colleges; it is a question of their implied duty to make themselves felt for good throughout all the studies of the public-school system. They are insensible to their high trust to the extent to which they neglect that duty. Nor should they wait until the high schools have risen, without their influence, to a certain standard of efficiency in their general courses, but they should connect at once with them, throwing over to them temporary or provisional bridges until better ones can be built.

Now as a matter of fact the powerful influence of the colleges is moving in just this direction. If they are sufficiently generous in their recognition of the hitherto tabooed subjects, if they are not too exacting in their first demands for attainments in them, the promise is bright for a fair junction with the whole high-school system rather than with a section of it,—a union of forces sure to help the high schools, to say nothing of the colleges, and, therefore, likely to gratify the public that pays the high-school tax.

Here let me call attention to a new force that is making itself felt throughout the high-school system. I refer to the state normal schools. In 1896 candidates for admission to the schools were required to be high-school graduates or to have received an equivalent training, and, for the first time, to pass examinations in high-school subjects. Until quite recently, one could step from the grammar school directly into the normal school, omitting the high school altogether—a kind of short circuiting that was calculated neither to interest the high school in normal-school work nor to inspire it with respect for normal-school standards. All this was as bad for the high school as for the normal school. Since 1896, however, the normal schools have compelled the attention of the high schools. High-school

pupils, in larger numbers than ever before, have aspired to enter the normal school, and high-school masters have bestirred themselves as never before about the fitness of these pupils to do so. The new normal schools, in their admissions, have surpassed the most sanguine anticipations; the old have grown handsomely in spite of the new. The numbers admitted under the new policy were 389 in 1896, 630 in 1897, 584 in 1898—numbers, respectively, 7 per cent. less, 52 per cent. more, and 40 per cent. more than the average number of admissions for the last eight years of the old policy. Nor has this gain been secured by excessive indulgence; 63 candidates were rejected in 1897 and a larger number in 1898.

The normal school examinations bear directly upon the general courses pursued by the vast majority of pupils; they deal with themes which elementary teachers must know if they are to teach well. They are so shaped as to give options to candidates, and, therefore, to abound in valuable suggestions to the high schools; they call for power rather than for memory; and are so framed, when the colleges require the same subjects, as not to work at cross purposes with the college requirements, but in harmony with them. It is, for instance, unsound pedagogically as it is wasteful pecuniarily to teach English one way for the normal schools, a second way for the colleges, and a third way for those going to neither. A course in English suited to any one of these three cases should answer for the other two. avoid encouraging a needless division of the English instruction in high schools, the normal schools adopt the entrance requirements in English of the colleges.

To show the extent to which higher institutions are interested in the high schools, let me say that in 1896 244 high schools—not quite the full number—sent 374 graduates to the normal schools; in 1897, 576—a gain of 54 per cent. In 1896 they sent 232 to high scientific schools; in 1897, 274—a gain of 18 per cent. In 1896 they sent 715 to the colleges; in 1897, 789—a gain of 10 per cent. The total for 1896 was 1321; for 1887, 1589—a gain of 20 per cent. Fully half of those who

pass through the high school to institutions above now take what is called the general course as opposed to the traditional college preparatory—the course of the great majority. All this tends to tone up and dignify the general course.

These figures bring out the striking importance of the high school as a factor in the preparation of the teachers of the commonwealth. It furnishes a large part of the academic training of the teachers who are destined to go out from the normal schools into the common schools of the state. The better the methods, the scholarship, the spirit of the high school, on the one hand, the better, on the other hand, will its graduates do in the higher institutions as students, and in the common schools again when they appear there as teachers. I hardly need to say that the people are seeing with varying degrees of clearness these intricate and far-reaching relations of the high school to teaching efficiency in general, and, therefore, are finding added reasons for maintaining and improving the instruction it gives.

It should be noted, in this connection, that the teachers of the high school have been largely those who have taken the traditional classical course of the high school, and, having graduated from college, have returned to the high school with their very natural classical bias. Undoubtedly, our high-school system, while in many ways uplifted by the intensive work and scholarly spirit of such teachers, has been unduly subordinated in the past to ideals which, whatever their excellence, have not been sufficiently pertinent to the demands of modern life. group of foreign languages, for instance, still costs the public four dollars where English costs one dollar and the group of sciences, one dollar and fifty cents -- a distribution of cost that impressively shows the classical domination. It would be very strange if the teaching in the elementary schools had not felt such over influence. Whatever else the elementary teacher may need, she needs a scholarly equipment in English, nature themes, history, music, and certain manual arts-an equipment to which the classically trained high-school teacher might easily fail to make adequate contribution. It is the general courses of the

high school—those planned for the non-college pupils—that best meet the needs of the elementary teacher. Fortunately, these courses are gaining in strength; good teachers for them are less rare than they once were. The notion that inferior teaching will answer for non-college pupils is an exploded one. If it takes a high order of qualifications to teach Latin well, it takes a higher order to teach English well. Arm-chair subjects make smaller demands on executive capacity than laboratory or outdoor subjects. Precise things of small range are more readily taught than vague things of indefinite range-algebraic equations, for example, than principles of art or of morals. literature always loomed up before me as a vast, imperious and taxing theme to teach; when I wanted relief, I betook myself to college mathematics. In short, the general courses, on the whole, demand higher teaching power—at any rate, they present more perplexing problems—than the traditional college preparatory course. Of the 40,000 pupils in our high schools, 35,000 take the general courses—a great, stubborn fact that the high schools cannot get away from; a fact that must be metis gradually being met-by better teaching-teaching that cannot but exert a wholesome influence in time on all the other teaching in our common schools. We cannot go far in contemplating the academic training of teachers, and, therefore, the sort of instruction they are likely to give the youth of the state, without seeing that the colleges, the high schools, the elementary schools, the teachers, and the public are so intricately bound together in common interests that none of them can afford to ignore the rest.

Not only are there ample reasons, in theory, why the public should value and support the high school, but there are ample evidences in fact that these reasons are mighty with the public. Consider for a moment the rise of the high school and its present remarkable hold on the loyalty of the people. Our educational history shows in the spirit of the people the Golden Era, the Dark Ages and the Renaissance—the Golden Age in the beginning, the Renaissance in our own time, and the Dark Ages

between. There was the action of the Colony of Massachusetts Bay in 1647, ordering that towns of 100 families should each maintain a grammar school, that is, a college-fitting school. was Latin grammar and Greek, not English, that it taught. English grammar, as we understand it, was hardly known. It is a significant fact that the Golden Age of English literature was a grammarless age; the art flourished, the science slept. In 1677, Plymouth Colony said that towns of 50 families may, and towns of 70 families must, keep a grammar school. The next important legislation was in 1789. People had been living through a hard century. It was becoming more and more trying for the towns to comply with the law. Many of them had ceased to do Accordingly the General Court relaxed the grammar-school law of 1647. It ordered that thereafter towns not of 100 families but of 200 should maintain a grammar school. Under the old law, 230 towns were required to maintain such a school; under the new, more than 100 towns were released from this requirement.

But the general court of 1789 unwittingly gave another damaging blow to the grammar schools. It unfortunately established the school-district system. Under this system the school district, not the town, became the educational unit. Not unfrequently a town was broken up into twenty or thirty such districts. As a result district spirit rose; town spirit, already feeble, fell to greater depths, and with this fall went a further decline in the grammar school, which was a town and not a district institution. In other words, the several districts absorbed the educational energy of the people, what there was of it, and the town, as a town, was left educationally dry and barren. In such a desert no grammar school could thrive. It was this decline in town spirit, this dying out of the grammar school, that led to the springing up of academies and private schools on every hand. Towns might grow cold about high-grade schooling, but there were spirited families enough to insist, whatever the sacrifice, on such schooling for their children.

The year 1824 saw low-water mark in our educational his

tory. There were 172 towns that should have been supporting grammar schools under the law of 1789. Very few of them, however, were doing so. Accordingly, the legislature exempted all towns under 5000 inhabitants from maintaining them; that is to say, it exempted 165 of those 172 towns, all of them but 7. It was no longer only 100 families in the town, as in 1647, no longer 200 families, as in 1789, but practically 1000 families that created the obligation to maintain a grammar school. Thus the grammar school was nearly extinguished and its very name began to fade in oblivion. The altar fires of high ideals, however, were kept alive in the academies. It was the very success of these academies that, in a way, checked their growth and led, with some notable exceptions, to their reduced importance or their demise. It was largely because of them that the demand for free secondary instruction revived. It became a burning question everywhere, "Why should not the children of all the people enjoy advantages equal to those of the favored few?"

The reaction from the legislation of 1824 came quick and sharp. In 1826 the legislature ordered that towns of 4000 people should maintain a high school of the first grade; towns of 500 families, a high school of the second grade. Here was a partial return to the policy of the fathers, the beginning of educational repentance. The chief original difference between the two grades was that the first taught Latin and Greek, while the second did not; the first connected with the colleges in the traditional way, the second ignored the colleges and was ignored by them. And now for some years the policy of the state was singularly vacillating. There was a locking of horns between the progressive party and the conservative. The law of 1826 had been in force but a short time when the requirement of a second-grade high school in the case of towns with 500 families was repealed; in 1836 it was restored; in 1840 it was practically repealed again; and in 1848 it was restored again, this time to stay until another advance became possible. So we see that it took just twenty-two years to clinch the legislation of 1826.

For many years after 1826 the high-school outlook was far from encouraging. The law was explicit enough, but towns consulted their pleasure about obeying it. In 1838, for instance, out of forty-three towns required to maintain high schools, only fourteen were doing so. But the upward movement, long delayed, began at last. The missionaries of the movement were Horace Mann and his fellow-workers. In 1852 there were 64 high schools; in 1866, 156; in 1876, 216; in 1886, 229; in 1897, 262.

In 1891 the state took a step which placed it, for the first time, in advance of the policy of the founders. It ordered that free high-school tuition thereafter should be the legal right of every properly qualified child in the commonwealth. Every town, without exception, must furnish it either in its own high school or in that of a neighbor. Other states have gone beyond Massachusetts in making the college or university a part of the public-school system, but Massachusetts was the first state in the union, if not the first in the world, to make it compulsory on all its towns to provide free high-school instruction. Such compulsion bore with hardship, of course, on many small and feeble towns. Hence the policy in such cases of state reimbursement of high-school tuition payments.

In 1898 the legislature abolished the distinction between first-grade high schools and second, the people having previously abolished it in most of the towns. The aims of the high school were for the first time specifically stated—to give such instruction as may be required for general purposes of training and culture, as well as to prepare pupils for admission to the state normal schools, to high technical schools, and to the colleges. The length of the high-school curriculum was for the first time fixed; there must be at least one course four years long. And to ease somewhat the burden of this newly defined high school upon the small towns, it was made permissible for them to arrange that a portion of their high-school instruction may be given in the high school of another town. A town, for instance, may maintain a high school for a part of the course if it will

pay for the rest of the course elsewhere. This progressive legislation is, in itself, an expression of the people's conviction of the value of the high school. It has placed the high school in the best legal position it has ever held. The law can do but little more. It remains now to round out the high school to the full measure of its great opportunity; to see to it that its inner life responds in spirit and efficiency to the statutory ideal. Now, this is precisely what the educational forces of the state are trying to do. The gratifying fruits of their activity abound on every side. So far as these fruits are intellectual and spiritual, it is not easy to measure them. In their outward, material and visible aspects, however, they lend themselves happily enough to adequate presentation. A monograph of these outward aspects has been prepared to accompany this paper.

There is the numerical growth of the high school, for example. In round numbers, some 40,000 boys and girls attended the high schools of the state last year. This is double the number fifteen years ago. The gain is an astonishing one, as we shall see if we note that during these years the population of the state has increased but 40 per cent., while the number of pupils in the high school has increased 100 per cent. It would be strange if it should not appear that a part, at least, of this surprising growth was due to the growing efficiency of the high school. It would be equally strange if the surprising increase in the number of citizens immediately interested to have their children well taught did not have something to do with spurring the high school to still greater efficiency.

These 40,000 children in the high school constitute between 8 and 9 per cent. of the total enrollment of children in the public schools. The significance of an 8 per cent. enrollment in the high schools is totally and persistently misapprehended by large numbers. "Only 8 per cent. of the children in the high school," they say. "Then 92 per cent. never attend the high school." Instantly the conclusion comes from this blundering premise that the high school is for the few, the lower schools for the many; and, therefore, it becomes the public to expend less

money than it now does upon so inconsequential a part of the public-school system. Ought it not to be seen, with a moment's reflection, that in an ideal community, where every child, without exception, rises through all the grades and finally graduates from the high school, only a small percentage of the children can be enrolled in the high school at any one time? In this ideal community, if its population is assumed to be constant, the highschool enrollment can by no possibility exceed from 31 to 33 per cent., and yet every child enjoys, when his turn comes, highschool privileges, or, in other words, the percentage of enjoyment is 100. Under existing Massachusetts conditions the percentage of enjoyment is approximately three times that of enrollment—rather more, if anything, than less. In brief, 25 per cent. of the children of Massachusetts enjoy more or less of the privileges of the high school, and there are many towns where the percentage rises to 40, 50, or even 60. Now when the highschool attendance is seen in its real magnitude and true light, it is found to represent a much larger number of people and homes than many have suspected—a fact that has much to do with the hold of the high school upon the people, and the demands of the people on the high school.

In no way can we explain the great interest of the people in large, well-appointed, and beautiful buildings for their high schools unless we attribute it partly to the growing worth and promise of the high school and partly to the very large number of people who have gone through the high school themselves, or have sent their children there, or have children now in attendance there, or are going to have some there, or who prize the high school on general principles. Such buildings are going up all over the state, with approved systems of heating, ventilation, and sanitation, with libraries, laboratories, drawing rooms, gymnasiums, offices, and halls, the interior frequently decorated by the voluntary offerings of friends, the exterior as pleasing as architectural skill can make it, and the grounds not rarely spacious, and laid out in excellent taste. Private munificence has supplemented civic interest all over the state in furnishing

our towns with commodious and well-furnished libraries. Private munificence is now supplementing civic interest with increasing gifts of lands or of buildings or of equipment for the schools—often better buildings than the taxpayers would be justified, with all their enthusiasm, in erecting. These things are outward expressions only, it is true, but one cannot avoid the feeling that back of these expressions there is a growing worth in the schools that excite it as well as a growing conviction in the public mind that whatever that worth is, there is a greater measure of it that merits striving for.

Massachusetts, unlike many states of the Union, has no state college or university to crown her public-school system and to which graduates of her high schools may gain admission without payment of tuition. She has, indeed, taken a deep interest in collegiate education. One of the first acts of her general court was to set apart £400 for Harvard College. At sundry times she has aided higher institutions with money grants. In some of them she maintains free scholarships today. All this she has done, not simply in discharge of a constitutional duty, but because, as of old, it is her heart's desire to foster advanced learning in her midst. Stopping as she does with the high school in her public-school system, but encouraging, as she is bound to do and actually does, the higher education of youth in colleges and universities, Massachusetts is under bonds in this quarter not only to make her high-school system as efficient as possible, but in particular, to connect it as squarely and fully as possible with what there is beyond. The damming up of the system along six-sevenths or any other fraction of the upper highschool line she does not view with complacency. In no better way, under present conditions, can the state foster the higher than by fostering the lower. The money burden of the former rests chiefly on private interest and munificence; so much the more, then, should the money burden of the latter rest on the public.

We dwell much on the sentimental dividends of public education. There are dividends in plain hard cash or its equivalent

that appeal to people in quarters where sentiment is at a discount. Dr. Harris, the United States Gommissioner of Education, not long ago called attention to a striking coincidence. Each child in Massachusetts, he said, receives on an average seven years of schooling; each child in the nation at large, only four years and three-tenths. The ratio is 70 to 43. The average daily wealth-producing power of each man, woman and child, Dr. Harris continued, was, during the year taken for the comparison, 73 cents in Massachusetts, while for the nation at large it was only 40 cents. The ratio is 73 to 40, the excess being 33 cents a day.

I am informed by Horace G. Wadlin, Chief of the Massachusetts Labor Bureau of Statistics, to whom I applied for a verification of Dr. Harris's statement, that, according to the latest obtainable figures, the net result of productive industry in the United States, including under that head the net product of manufactures, agriculture, fisheries, mines and quarries, in the single year covered by the census, amounts to \$114.14 per capita, or, on the basis of 306 working days in the year, to 37 cents per working day for every man, woman, and child. A similar computation for Massachusetts, based upon figures obtained in the same census, shows an average per capita pro duction of 66 cents per working day. The ratio, according to these figures, is 66 to 37, the excess being 29 cents a day.

The lengths of schooling for Massachusetts and for the country at large have slightly increased since Dr. Harris's statement, but their ratio has not materially changed. Whether we take Dr. Harris's earlier showing or Mr. Wadlin's later, the larger wealth-producing power accompanies the longer schooling, and the excess of the one follows very closely the excess of the other. Now this cannot all be a mere happening. If it is true that intelligence produces more than ignorance, then excess in wealth-producing power must hold some relation to excess in knowing and doing power.

Consider for a moment what is involved in the showing that each person in Massachusetts has a daily wealth-producing

power 29 cents in excess of the average for the nation at large. It means that for each person the average annual excess is \$88.74. It means that for all the people of the state the annual excess is \$198,686,802. That is to say, the productive energy of Massachusetts yields nearly 200 million dollars a year more than it would yield if the per capita productive capacity of the state were no greater than the average throughout the country. This is twenty times the annual running expenses of the public schools, It is not necessary to attribute to the schools this vast excess of production above the average for the country to prove that they pay enormous material dividends. If so humble a fraction as a fifth or even a tenth part of this excess, or of an aggregate much less than this excess, of 200 million dollars can be traced to the schools, they are yet securities that each year return to the state much more than their annual cost. The education of the people, combined with the openness of the avenues by which the people may rise, works in two ways. It stimulates material wants on the one hand; it makes them more numerous, complex, refined. And all this, on the other hand, makes a stronger call both for high directive ability and for skilled labor to supplement such direction. Thus the field for production is enlarged and, at the same time, husbandmen to till it are trained.

It is impossible, of course, to say how much the high school contributes to this industrial superiority, either indirectly in what it does for the school system as a whole or directly in the training it gives its own pupils. It is safe to assume, however, that if Massacusetts is to maintain its high place as a wealth-producing state it must rely more and more on doing the finer, the higher, the more difficult kinds of productive work, -- work, therefore, whose trend it is to call for increasing skill not only in planning it but also in doing it when it has been planned. And this means that it is sound public policy to encourage drawing and other industrial aspects of education, to extend the systems of manual training, to establish textile and similar schools, to foster the higher schools of applied science, to make it possible, through state scholarships in such schools, for the promising poor to receive that higher training which their minds merit but their purses forbid,—in short, to welcome any methods of education that promise to recognize more fully the realities of life and to do more for the motor and executive functions that need to be trained to cope with such realities. With such a public policy the public high school cannot but hold the closest and most vital relations. I do not myself rest the argument for the encouragement of such a policy on the mere material advantages that come from it. Its utilitarian values are recognized, indeed, but apart from all considerations of dollars and cents, there are intellectual and moral values of supreme moment that amply justify it. I need not dwell on these higher values in this presence. In our technical schools there is a growing appreciation of the æsthetic and ethical aspects of themes too commonly supposed to be outside the pale of such regard. In our literary schools, laboratory and manual exercises are winning steadily increasing recognition. I deem it a happy conjunction that so many who urge the spiritual argument are ready to unite with those who press the material in framing common curricula. Certain it is that schemes of education today may contemplate more directly than in former years the so-called utilitarian values without dethroning at all the traditional spiritual ideals.

Is the tone of this paper too optimistic? Let me frankly admit, then, that there are respects wherein the best of our high schools admit of great improvement; and as for the worst of them, nothing short of a vigorous shaking up of their dry bones will meet the exigencies of their case. One's attitude towards the high schools of the commonwealth turns very much on whether one is looking down the hill up which they have thus far come, or up the hill where they still ought to go. One may feel proud in the one case and solicitous in the other, rejoice in the movement hitherto and grieve that any break should check its triumphant advance. We have a right to be gratified, but no right to be satisfied. One of the strongest signs of an unhealthy state is perfect satisfaction with an existing state. Perfect satisfaction means easy satisfaction; easy satisfaction, a low ideal;

a low ideal, cessation of growth; and cessation of growth, retrogression and stagnation. When, however, the question is asked whether the facts justify the public in maintaining the highschool system, a broad view permits but one answer, and that answer, after making every allowance for imperfections, avoidable and unavoidable, is an unhesitating "yes," - an answer that may be given with increasing emphasis as the system gains in efficiency.

DR. THOMAS M. BALLIET, Superintendent of Schools, Springfield: Mr. Hill has made the strongest defense of the high school as it now exists which I have ever heard. It seems to me the question of high-school education at public expense ought not to be an open one any longer in this commonwealth when our western states have their state universities, and even we have our agricultural colleges, supported by public taxation. In my judgment, the question as to how far education should be carried on at public expense is purely one, in the first place, of public sentiment and general intelligence, and in the second place, one of economy. The public school system exists not so much because the state must educate its citizens as a means of selfpreservation, as because the people in the community want their children to be educated, and they find that they can accomplish it most effectively and most economically by clubbing together and supporting schools by public taxation. Mr. Hill has justified the high school as it now exists. I should like to suggest a possible extension of its work for which we may not be ready now, but which public sentiment is likely to demand some time in the future. To illustrate: There are now about 80 graduates of our local high school in the freshmen and sophomore classes of various colleges and scientific schools of college rank. The average expenses of these 80 students is not less than \$550 It is more rather than less. The total annual expense to their parents, citizens of Springfield, is therefore about \$44,000. It cost us last year \$30,416.63 to run our high school. This includes free textbooks, fuel, and all incidentals, as as well as tuition. In round numbers the school had 500 pupils. It therefore cost \$13,584, more to educate 80 Springfield students in college last year than it cost to educate 500 at home, not taking into account cost of board of the latter. If these 80 students could have remained in the high school, we could have furnished a teaching force to teach them as well as they have been taught in college,

for about \$8000, or at most \$9000. Their parents would have had to board them at home. A fair average cost for this board would be \$3 a week. For the college year of about 36 weeks this would have amounted to \$8640. The total cost of educating them at home would therefore have been in round numbers about \$17,000, only \$9000 of which would have come out of the public taxes. There would thus have been a saving of about \$27,000 in one year to citizens of Springfield. It seems to me as a matter of economy the public will demand some day that the high-school course be lengthened two years so as to cover the first two years of the college course. Such a course would make our leading high schools equal to what good colleges were 25 years ago, and would make them fitting schools for the universities, for law schools, and for medical schools, etc.

Higher education in this country is today in a far more chaotic condition than elementary and secondary education. We are just evolving real universities. Most of our colleges are doing strictly collegiate work during the first two years of their courses and are attempting to do university work the last two years. Only very few of them, however, have either the teaching force or the necessary facilities for original research which are absolutely essential to genuine university teaching. work of the first two years of our colleges is simply a continuation of the high-school course. It ought to be considered a part of secondary education and not a part of higher education. The line of demarcation between secondary and higher education is not drawn at present where it should be. The high school could do the work of the first two years of college fully as well as the colleges are doing it. It would follow, of course, that we should have to secure as teachers for the higher classes in our high schools persons who have had not only a college education but also thorough university training. This grade of scholarship will soon be required, in any event, for the more important positions in high schools, and adding the first two years of the college to the present high-school course would simply hasten this desirable advance in the standard of high-school teaching.

The work of the last two years of the college can be done far more successfully by the universities and should be relegated to them. The high school should in the future aim to give the whole of that general training, commonly spoken of as "liberal culture," which is necessary to all lines of university work, and all special training should be relegated to the university. In the process of this reconstruction the

college would naturally drop out as a college, and university courses would be lengthened. What we need in higher education today is earlier and broader specialization.

The stronger colleges would be converted by this change into small universities, devoting themselves to a few special lines of work which they would have the funds to provide for; and the weaker colleges would do the same work as the high schools, and would come in competition with these schools as our academies did less than a generation ago.

This is not so radical a change as it would at first appear. In Germany and France the college as we know it in this country does not exist. Students pass from the gymnasium and the *lycée* directly to the universities and the professional schools. The course of study in a German gymnasium is about two years longer than in our high school. What is here suggested is therefore just what has been done for years in Germany and France with great success. The American high school can easily be made broader in its training than the German gymnasium, and it will not be difficult to avoid some of the weak features of that institution.

It seems to me such a step would have a very wholesome effect on our largest institutions; for even our leading universities, with the exception of two or three, have collegiate departments in which the great majority of their students are registered. It would, in the first place, relieve these institutions of the two largest classes in their undergraduate department and save them the expense of a good part of their teaching force. The money thus saved could be used to strengthen the higher departments. This would be equivalent in effect to additional endowments. The exceptions would be only those few institutions which charge more for tuition in the freshman and sophomore years than the instruction costs, and thus make the first two classes in the undergraduate department a source of revenue to the institution.

It would, in the second place, tend to make the teaching in these now overcrowded institutions more effective. Under present conditions they are compelled to resort to the lecture system of teaching, simply because they cannot afford sufficient teaching force to provide classroom instruction. This system in the case of a few professors is very effective; in the hands of the ordinary professor it is exceedingly ineffective. It would be impossible to fit boys either for Yale or for

Harvard by the lecture system. If it were not for the coaching by persons not on the teaching force and for the difficult final examinations, many boys would get very little from this system of teaching. The freshmen and sophomore work could be done more effectively in the high schools than in the colleges, since students in the high schools would be divided into groups small enough to make thorough teaching possible.

The social life and the good fellowship which now form so important a part of college training would not necessarily be lost in the changes here indicated. It seems to me it would naturally be transferred to the university. For obvious reasons it could never be developed in the high schools. It exists in foreign universities, especially in Germany, and there seems to be no reason why it could not be developed in our American universities.

Dr. Huling: There are one or two considerations which I would like to mention in connection with the addresses of the morning. is clear from Dr. Hill's review of the history of educational legislation in Massachusetts that the high school is the "survival of the fittest." The free public high school has proved itself the best adapted to meet the needs of Massachusetts communities, in the peculiar conditions which press upon them, of all the institutions for secondary education that have been tried. Our forefathers brought over with them the English public school, in which the leaders among them had been trained. It was impossible that private endowment should establish them upon a firm basis here as had been done in England. Therefore the towns undertook to accomplish the same service, and all through the leading communities of New England such schools were established by the initiative of the town, and were maintained by a combination of fees and town grants. After a century and a half of experience with this kind of school, it was found, as Dr. Hill has pointed out, that the experiment had failed. Then certain individuals or groups of individuals undertook, under great difficulties, to establish secondary schools, in which the leading families of the community might have their young people educated; and the state was later induced to assist them. Here private initiative was the leading interest, and the help of the state a secondary and very subordinate one. But that plan did not accomplish the purpose effectively save in favored localities, and so there arose the idea of establishing a secondary school that should be

completely free, opening it to all who could prepare themselves to enjoy its privileges. Under this policy the last three-quarters of a century has seen a wonderful development of secondary education, and the end is not yet. This history furnishes one answer, I think, to our main question today. There will in the next century be very little question of the wisdom of generous public support for secondary schools that really prepare pupils for useful lives. Private schools will always exist, and will serve valuable ends, but in the main it will be expected that the community as such shall take care of its children up to the end of a high-school course.

Another consideration has reference to the argument drawn from Dr. Harris's and Mr. Wadlin's statistics. A question may arise as to whether the superiority of Massachusetts working people over the average working people of the United States is not due somewhat to their ancestry. People will say, Is it not true that in Massachusetts, the home of the Puritans, there is more than elsewhere of the Anglo-Saxon blood pure and unadulterated? Unfortunately for that argument, later statistics show that Massachusetts is not now chiefly an Anglo-Saxon state. It is true, certainly, of the thickly settled parts of the state, that more than 50 per cent. of the people one meets upon the streets are not of native stock. They are of foreign birth or parentage. And I am not sure but statistics will show the same to be true of the state as a whole. We do not comprehend, unless we look into the matter, how complete a change has come over the population of Massachusetts since the days of the Civil War. It is not true that Anglo-Saxon ancestry is the chief element of the superiority of Massachusetts working people. There is no element in it which is more likely to be the effective one than that which Dr. Hill stated as probably the chief cause of this superiority—the superior advantages of education freely supplied by the commonwealth.

I should like to say one word also relating to this noble idea which Dr. Balliet has put before you, concerning the future of the high school. I do not know whether it is best for our educational interests in America that the college, as a distinctive institution, should be given up, and that we should have simply the secondary school on the one hand and the university on the other, as in France and Germany. But I know this, fellow teachers in the high school, that if any such thing as this is to come, we must prepare ourselves better for the added responsibilities thus imposed than we are today prepared. In Dr.

Hill's supplementary document, which has been distributed among you, you will find that in the high schools of Massachusetts (which are probably as well equipped with scholarly instructors as any high schools in the country) only 67 per cent. of the teachers appear to have had any higher education than the high school itself affords. the state should, today, entrust the education now given in the first two years at the colleges to the high schools, it would be administered by a corps of teachers, one-third of whom have not had college education, or the equivalent of it. If this can be done successfully, strong reasons would need to be adduced to make the community believe it. I think there are some indications that Dr. Balliet's ideal is one toward which the educated public is tending. It is very likely, whether wise or not, to be a twentieth century realization. For this as well as more pressing reasons, those of us who are responsible for the selection of high-school teachers must be careful to choose those whom we know to be well furnished with academic and professional equipment for genuine secondary instruction.

Professor Rice: A word in regard to Dr. Balliet's paper. As might be expected from its authorship, it was original, fresh, and forcible, and well worth serious consideration. I confess it strikes me, however, that an attempt at present—whatever might be said of it as to the future—to abolish the American college, to convert the high schools into gymnasia, and to convert the the survivors of our colleges into universities of the German type, would be a move in the wrong direction.

It does seem to me that the American college, substantially as it is, taking boys and girls at about the age at which it does take them, and keeping them through just about the four years through which it does keep them, is a very serviceable institution. It seems to me that the American college, in precisely those points that have been referred to, does accomplish something, the lack of which is felt disastrously in the German system of education, in which there is a sudden and abrupt transition from the strict discipline that prevails in the gymnasium to the absolute lack of discipline that prevails in the university. There the transition is absolutely abrupt, from the strict discipline that belongs to childhood, to the absolute freedom that belongs to manhood; from the severely didactic processes of instruction, wherein the mind of the student passively submits to guidance, to the absolute

freedom of investigation, or attempt at investigation, which belongs to the fully developed man. And it seems to me that the abruptness of that transition is, in part, the cause of one of those features in German university life which every observer has recognized as utterly lamentable, namely, the fact that a large part of the students celebrate their emancipation from discipline by spending their first year, or their first two years in the university, in idleness and things that are worse than idleness. It seems to me that the American college, by making a gradual transition from the methods of discipline and instruction that belong to the lower schools, to the freedom and independence of investigation that belong to the university, carries the student over a critical period of his mental and moral development in a way which is decidedly more wholesome than the German method.

It seems to me that we would do a better thing if we should try to make the high school do high-school work better, and the college do college work better, than if we should try to transform our high schools into colleges and our colleges into universities. An institution that is intermediate between the secondary school and the university, wherein the strict discipline of the school passes by easy gradations into the freedom of the university; wherein the didactic methods of instruction in the school pass by easy gradations into the independent investigation of the university—such an institution seems to me to be an exceedingly wholesome thing, and I believe that the last thing we want to abandon in our American educational system is the American college.

While I am on my feet, I should like to say a word in regard to one or two points that were touched upon in the paper of Dr. Hill. He pointed out to us the conditions of the institutions of secondary instruction, under their different names of grammar (or Latin) schools and academies and high schools, in the different periods of the educational history of New England.

I want to call your attention a little more pointedly, perhaps, to the very striking difference between the first and last stage in their development—between the grammar school as it originally existed, and the high school as it is today.

The grammar school's purpose was preparation for college, and the curriculum was almost entirely Latin, Greek, and mathematics. The grammar school was a development of the colonial life of New England, before the thought of New England had really acquired a democratic character. Our Pilgrim fathers were not by any means democrats. They were aristocrats. They were Englishmen, and their traditions and modes of thought were English; and it required an independent development, under new conditions, in a new country, to make the thought of their children democratic. There was then precisely that sharp distinction between classes and masses which Dr. Hill condemned, and claimed rightly should not be recognized in the life of today. There was a perfectly sharp distinction between the small class destined for the learned professions (the "Brahmin caste" of New England, as Dr. Holmes has felicitously called it), and the mass of the population, whose education in school was substantially limited to the three R's. The grammar school was precisely adjusted to that aristocratic idea of an educated class separated by a strong line of demarcation from the masses. The high school, as it is today, is as thoroughly democratic an institution as the old Latin school was aristocratic. It is related to a type of society with no sharp distinction between the educated and the uneducated class, but only with what must ever exist, the indefinite gradation of more and less educated. The high school has become therefore the people's college. It has given opportunity for a genuinely liberal education to those whose circumstances do not allow them to take an extensive course in the preparatory school and college; and the high school, therefore, becomes eminently a representative of the characteristics of our age, a thoroughly democratic institution in our democratic society.

I would say most hearily "amen" to the doctrine advocated by Dr. Hill, that there ought to be such a relation between the college and the high school, that not one particular course in the high school, but all the courses, should fit a student for college. The ideal educational system is a system with so complete a unity through all its grades, that at any particular stage the student will have received the education that will best fit him for practical life if his schooling must end at that stage, while, at the same time, he will have received the best preparation for subsequent training in case he is permitted to go further in the educational course. Now, the course of study in the Latin school, and the classical preparatory course in the high school, makes no approximation to that condition. No one would claim that the Latin, Greek, and mathematics, as taught in the old Latin school, or even the somewhat modified form of the same discipline which exists in the classical course of the high school today, is the best

educational course for a student who must finish his schooling in that It is not a small body of education, complete and symmetrical in itself. It is a torso of a big body of education, which the student cannot make complete and symmetrical if he is unable to go to college. In this respect there is need of most radical reform. And I believe the tendencies in that direction are making themselves felt. The report of the Committee of Ten shows the direction in which the relations between the colleges and the high schools must be modified. The colleges must adapt themselves to the democratic institution of the high school, and not to the aristocratic and obsolete institution of the Latin school.

With this the discussion closed, and the thirteenth annual meeting of the association came to an end by adjournment.

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